

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A servo control apparatus of an optical pickup for reading recorded information from a recording medium to generate a read signal, comprising:
 - an error signal extractor for extracting an error signal from said read signal, said error signal indicating a deviation from a servo target value of said optical pickup;
 - an equalizer including a phase compensator for equalizing said error signal by said phase compensator to generate a drive signal;
 - a driver for changing the servo position of said optical pickup in response to said drive signal;
 - a dropout detector for extracting an envelope signal from said read signal to detect a dropout of said read signal; and
 - a controller for changing an equalization characteristics of said equalizer in accordance with an amplitude of the envelope signal during the period of time when said dropout occurs.
2. (original): A servo control apparatus according to claim 1, wherein said equalizer includes an integrator for integrating said error signal to generate an error integration signal and an adder for supplying an added signal of an error proportional signal which is proportional to said error signal and said error integration signal to said driver as said drive signal; wherein,

when the amplitude of an envelope signal during the period of time when said dropout occurs is less than a predetermined value, said controller performs at least one of decreasing the error proportional signal component in said drive signal and increasing the error integration signal component to change said equalization characteristics.

3. (original): A servo control apparatus according to claim 2, comprising:
 - an integral value calculator for calculating an integral value of said error signal for each predetermined angular section of rotation of a track on said recording medium;
 - a memory for storing each of the integral values for one rotation of said recording medium;
 - a variation calculator for calculating a variation by comparing said integral value for an angular section of rotation where said dropout occurred with a stored integral value for the identical angular section of rotation prior to the occurrence of the dropout;
 - wherein, when said variation is larger than a predetermined value, said controller performs at least one of decreasing the error integrated signal component and increasing the error proportional signal component to change said equalization characteristics.

4. (currently amended): A servo control apparatus of an optical pickup for reading recorded information from a recording medium to generate a read signal, comprising:
 - an error signal extractor for extracting an error signal from said read signal, said error signal indicating a deviation from a servo target value of said optical pickup;

an equalizer including a phase compensator for equalizing said error signal by said phase compensator to generate a drive signal;

a driver for changing the servo position of said optical pickup in response to said drive signal;

a dropout detector for extracting an envelope signal from said read signal to detect a dropout of said read signal; and

a controller for changing an equalization characteristics of said equalizer in response to an occurrence of said dropout;-

wherein said controller increases a phase margin in a predetermined frequency range of said equalizer in response to the beginning of said dropout and decreases said phase margin in response to the termination of said dropout.

5. (canceled):

6. (original): A servo control apparatus according to claim 4, wherein said controller includes a timer for measuring the elapsed time from the termination of said dropout and performs control for changing said equalization characteristics of said equalizer based on the output of said timer.

7. (original): A servo control apparatus according to claim 6, wherein said controller changes said equalization characteristics of said equalizer gradually in accordance with the elapsed time from the termination of said dropout.

8. (original): A servo control apparatus according to claim 4, wherein said equalizer includes an integrator for integrating said error signal to generate an error integration signal and an adder for supplying an added signal of an error proportional signal which is proportional to said error signal and said error integration signal to said driver as said drive signal; wherein said controller performs, during the occurrence of the dropout, at least one of decreasing the error proportional signal component in said drive signal and increasing the error integration signal component to change said equalization characteristics.

9. (new): A servo control apparatus of an optical pickup for reading recorded information from a recording medium to generate a read signal, comprising:

an error signal extractor for extracting an error signal from said read signal, said error signal indicating a deviation from a servo target value of said optical pickup;

an equalizer including a phase compensator for equalizing said error signal by said phase compensator to generate a drive signal;

a driver for changing the servo position of said optical pickup in response to said drive signal;

a dropout detector for extracting an envelope signal from said read signal to detect a dropout of said read signal; and

a controller for changing an equalization characteristics of said equalizer in response to an occurrence of said dropout;

wherein said controller includes a timer for measuring the elapsed time from the termination of said dropout and performs control for changing said equalization characteristics of said equalizer based on the output of said timer.

10. (new): A servo control apparatus according to claim 9, wherein said controller changes said equalization characteristics of said equalizer gradually in accordance with the elapsed time from the termination of said dropout.

11. (new): A servo control apparatus of an optical pickup for reading recorded information from a recording medium to generate a read signal, comprising:

an error signal extractor for extracting an error signal from said read signal, said error signal indicating a deviation from a servo target value of said optical pickup;

an equalizer including a phase compensator for equalizing said error signal by said phase compensator to generate a drive signal;

a driver for changing the servo position of said optical pickup in response to said drive signal;

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a dropout detector for extracting an envelope signal from said read signal to detect a dropout of said read signal; and

a controller for changing an equalization characteristics of said equalizer in response to an occurrence of said dropout;

wherein said equalizer includes an integrator for integrating said error signal to generate an error integration signal and an adder for supplying an added signal of an error proportional signal which is proportional to said error signal and said error integration signal to said driver as said drive signal; wherein said controller performs, during the occurrence of the dropout, at least one of decreasing the error proportional signal component in said drive signal and increasing the error integration signal component to change said equalization characteristics.